SENIOR CIVIL ENGINEER

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

DEFINITION

To supervise, assign, review and participate in the work of staff responsible for performing professional and technical engineering services in the design and management of public works capital improvement projects; to ensure work quality and adherence to established policies and procedures; and to perform the more complex tasks relative to assigned area of responsibility.

DISTINGUISHING CHARACTERISTICS

This is the advanced journey level class in the professional Civil Engineer series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed and the complexity of duties assigned. Employees perform the most difficult and responsible types of duties assigned to classes within this series including management of the most complex engineering projects or exercising lead direction over lower level staff. Employees at this level are required to be fully trained in all procedures related to assigned area of responsibility.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Public Works Director/City Engineer.

Exercises direct supervision over professional and technical staff.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS - *Essential and other important responsibilities and duties may include, but are not limited to, the following:*

Essential Functions:

1. Plan, prioritize, assign, supervise, review and participate in the work of staff responsible for providing professional engineering services in the design and management of public works capital improvement projects.

2. Establish schedules and methods for providing engineering services; identify resource needs; review needs with appropriate management staff; allocate resources accordingly.

3. Participate in the development of policies and procedures; monitor work activities to ensure compliance with established policies and procedures; make recommendations for changes and improvements to existing standards and procedures.

4. Recommend and assist in the implementation of goals and objectives; implement approved policies and procedures.

5. Perform the more technical and complex tasks of the work unit including management and administration of construction and professional services contracts.

6. Supervise and participate in the work of lower level engineering staff in the preparation of project plans, specifications, cost estimates and contract administration for capital projects.

[illegible] specifications, cost estimates and contract administration for capital projects.

Essential Functions:

7. Supervise and participate in the inspection of capital projects; ensure compliance with applicable codes and regulations; provide resolutions to construction problems.

8. Prepare and/or review professional civil engineering designs for assigned projects utilizing a variety of computer software programs; perform detailed calculations and computations; prepare and/or review the adequacy and accuracy of computations, preliminary layouts and design work from field and survey data.

9. Review and approve changes to approved plans and specifications; process a variety of permits.

10. Exercise professional engineering judgment in accordance with current accepted practice of civil engineering and appropriate laws and codes.

11. Participate in the selection of technical engineering staff; provide or coordinate staff training; work with employees to correct deficiencies; implement discipline procedures.

12. Participate in the preparation and administration of assigned engineering program budget; submit budget recommendations; monitor expenditures.

Marginal Functions:

1. Attend and participate in professional group meetings; stay abreast of new trends and innovations in the field of civil engineering.

2. Perform related duties and responsibilities as required.

QUALIFICATIONS

Knowledge of:

Operations, services and activities of a public works engineering program.
Methods and techniques of engineering project management.
Principles of supervision, training and performance evaluation.
Modern and complex principles and practices of engineering construction.
Principles and practices of civil engineering design.
Terminology, methods, practices and techniques used in technical civil engineering report preparation.
Principles and practices of budget preparation and control.
Advanced mathematics work principles.
Recent developments, current literature and sources of information regarding civil engineering.
Pertinent Federal, State and local laws, codes and regulations.

Ability to:

Supervise, organize and review the work of lower level staff.
Select, supervise, train and evaluate staff.
Manage large and complex engineering projects.
Ensure project compliance with appropriate Federal, State and local rules, laws and regulations.
Coordinate phases of construction projects and prepare progress reports.
Analyze problems, identify alternative solutions, project consequences of proposed actions, and implement recommendations in support of goals.

Ability to:

Conduct comprehensive engineering studies and develop appropriate recommendations.
Perform research and solve difficult engineering problems.
Prepare and maintain civil engineering records and prepare comprehensive reports.
Develop, review and modify civil engineering plans, designs and specifications.
Exercise professional engineering judgment to achieve results consistent with objectives.
Interpret and explain City policies and procedures.
Prepare clear and concise reports.
Communicate clearly and concisely, both orally and in writing.
Maintain mental capacity which allows for effective interaction and communication with others.
Maintain physical condition appropriate to the performance of assigned duties and responsibilities.

Experience and Training Guidelines
Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Four years of increasingly responsible civil engineering experience.

Training:

Equivalent to a Bachelors degree from an accredited college or university with major course work in civil engineering or a related field.

License or Certificate

Registration as a Professional Civil Engineer in the State of California.

Possession of, or ability to obtain, an appropriate, valid driver's license.

WORKING CONDITIONS

Environmental Conditions:

Office and field environment; travel from site to site.

Physical Conditions:

Essential functions require maintaining physical condition necessary for sitting, standing and walking for prolonged periods of time and operating motorized vehicles.